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# WATER SUPPLY OUTLOOK NATIONAL AGRICULTURE NATIONAL FOR UTAH

JUN 1 1972

PROCUREMENT SECTION CURRENT SERIAL RECORDS

Prepared by

# U. S. DEPARTMENT of AGRICULTURE \* SOIL CONSERVATION SERVICE

Collaborating with

UTAH STATE DEPARTMENT OF NATURAL RESOURCES -- DIVISION OF WATER RIGHTS

In cooperation with U.S. Forest Service, Bureau of Reclamation, Utah Fish and Game Dept., Utah State University, U.S. National Park Service, U.S. Geological Survey, and other Federal, State, and private organizations.

MAR. 1, 1972 

#### TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

## PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise , Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

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#### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

# WATER SUPPLY OUTLOOK FOR UTAH

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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Report prepared by

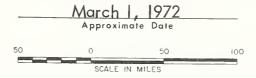
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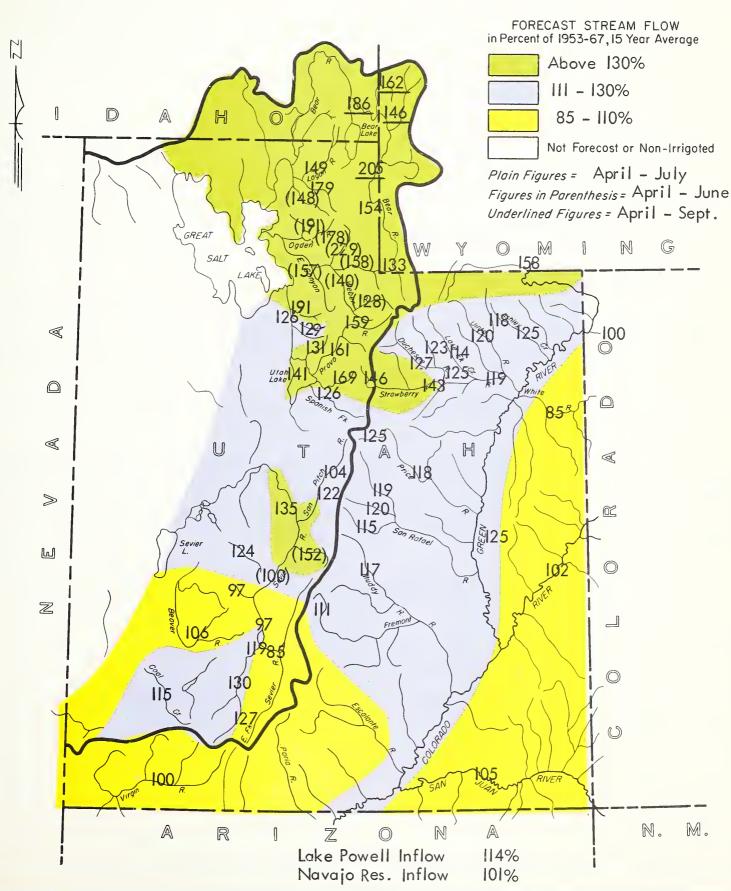
SOIL CONSERVATION SERVICE SNOW SURVEY SECTION FEDERAL BLDG., ROOM 4012 SALT LAKE CITY, UTAH 84111



# PROSPECTIVE WATER SUPPLIES

Based on Snow Surveys Made on UTAH and BEAR RIVER WATERSHEDS







as of MARCH 1, 1972

Snow Cover ranges from 97% of the March 1 average on Ephraim Creek in Central Utah to 176% of average on Lost Creek in Northern Utah. Precipitation was generally very light during the month in southern Utah and coupled with warmer than average temperatures, many snow courses lost water content instead of making their usual February gains. Snow courses in the remainder of the State did not lose water content but had less than average increases except on the Upper Ogden watershed and Lower Bear River area in Wyoming and Idaho where above average increases were measured.

Reservoir Storage in 14 principal reservoirs (excluding those of the Colorado River Storage Project) increased 29,960 a. f. during February and is now 143% of the March 1 average for the 1953-67 15-year period. The three Sevier River reservoirs (Otter Creek, Piute and Sevier Bridge) contained 268,650 a.f. or 193% of their March 1 average.

Colorado River storage decreased 5,400 a.f. during the month and is now 54% of capacity.

Great Salt Lake The elevation of Great Salt Lake was 4,198.80 feet above mean sea level, 2.00 feet higher than a year ago, and 7.45 feet above the alltime record low of October 1963. The lake rose 0.45 foot during the month and is 0.65 foot above the high of last year which occurred July 1. This was the highest level reached by the lake since July 1954 according to the U.S. Geological Survey.

Streamflow Forecasts now range from 85% of average for Minersville Reservoir Inflow and the East Fork of the Sevier to better than twice average for Lost Creek, Big Creek, and the Bear River near Randolph. South Fork of the Ogden is expected to produce 178% of its April-June average and the Inflow to Pineview Reservoir is forecast at 189% of average. The Lower Bear near Harer is expected to be 186% of the April-September average, the Logan River 149% and the Blacksmiths Fork 179% of the April-July average. The Inflow to Utah Lake is expected to be 141% of average and the Provo at Hailstone 159% of the April-July average. Uintah Basin forecasts range from 118% on Whiterocks to 143% on the Strawberry at Duchesne.

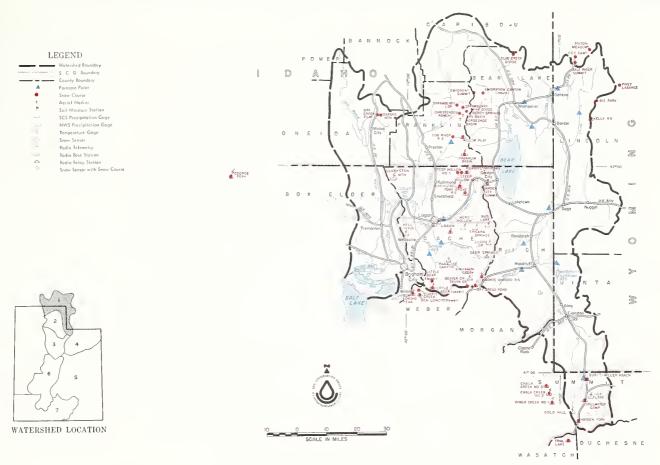
The Inflow to Flaming Gorge Reservoir is forecast at 158% of the April-July average and Lake Powell Inflow is expected to be 114% of average.

# WATER SUPPLY OUTLOOK (continued)

Price and San Rafael River forecasts range from 115% on Ferron and Gooseberry Creek to 125% for Scofield Inflow. Sevier River forecasts range from 85% on the East Fork to 162% for the Inflow Vermillion to Gunnison. Beaver River is forecat at 95% of average, Coal Creek 115% and the Virgin River 100%.

# BEAR RIVER BASIN in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



MARCH 1, 1972

The 1972 Water Supply Outlook for Bear River Basin is "Excellent".

 $\frac{\text{Snow Cover}}{162\%}$  now ranges from 137% of the March 1 average above Evanston to  $\frac{162\%}{162\%}$  on the Malad in Idaho. The lower Bear including the Smith's Fork averages about 150%. Logan River snow cover is now 138% of average or about 10% less than last year at this time. Blacksmith Fork-Little Bear snow cover is now 154% of the March 1 average. Most snow courses on the lower Bear in Idaho and Wyoming received above average February increases while those on the upper Bear had less than average increases in water content.

Reservoir Storage is above average (124%) in Bear Lake and Woodruff Narrows is still full, 149% of its March 1 average. Hyrum had 10,800 a.f. and Porcupine 3,200 a.f. on March 1.

Streamflow Forecasts raised 9 to 22% on the lower Bear in Idaho and Wyoming due to above average increases to the snow pack but dropped as much as 19% on other tributaries. The Thomas Fork is forecast to produce 51,000 a.f. (162%), Smith's Fork 158,000 a.f. (146%) and the Bear at Harer, Idaho, 420,000 a.f. (186%) during the April-September period. The Bear at Utah-Wyoming Line is expected to flow 141,000 a.f. (133%) and at Woodruff 160,000 a.f. (154%). Big Creek is expected to produce 10,000 a.f. (208%) and Woodruff Creek 25,000 a.f. (185%) which combines with the Bear below Woodruff to make the expected flow at Randolph 150,000 a.f. (205%) during the April-July period.

Logan River is expected to produce 148,000 a.f. (149%), Blacksmith Fork 75,000 a.f. (179%) during the April-July period and Little Bear 62,000 a.f. (148%) during the April-June period. Peak flows of streams in this area are expected to be higher than average again this year.

TREAMFLOW FORECASTS	THIS YEAR			PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET		
BASIN STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average *	
BEAR RIVER SYSTEM						
Bear at Harer, Idaho (1) Bear nr Randloph Bear nr Ut-Wyo. State Line Bear nr Woodruff Big Crk nr Randolph, Utah Blacksmith Fork nr Hyrum Little Bear nr Paradise Logan nr Logan (1) Smith's Fork nr Border, Wyoming Thomas Fork nr Ut-Wyo State Line Woodruff Crk nr Woodruff, Utah	420 150 141 160 10.0 75 62 148 158 51 25	186 205 133 154 208 179 148 149 146 162 185	Apr-Sept Apr-July Apr-July Apr-July Apr-July Apr-June Apr-July Apr-Sept Apr-Sept Apr-July	138 99 203	226 73 106 104 4.8 42 42 99 108 31 13.5	

# RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

		Usable	Usable Storage			
Basin or Stream	RESERVOIR	RESERVOIR Usable Capacity		Last Year	Average +	
<u>Bear River</u>	Bear Lake Woodruff Narrows	1421.0 26.5	1081.3 26.5	1095.2 26.5	871.4 17.8b	
Little Bear	Hyrum Porcupine	15.3 11.3	10.8 3.2	10.6 6.3	11.0	

# PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

	PEAK FLOW (SECOND FEET)					
FORECAST POINT	Forecast Range	Average +				
Big Creek near Randolph Logan River near Logan Woodruff Creek nr Woodruff	83 - 123 1025 - 1400 273 - 449	43 911 220				

- (1) Observed flow corrected for change in storage and diversions
- (3) Data obtained by radio USU-SCS cooperative sites
- b Average of all past records within the 15-yr period, but less than 15 years.
- x Adjacent drainage
- \* Partly estimated

## BEAR RIVER BASIN

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD  Water Content (inches)		
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average	
UPPER BEAR RIVER (Above Harer, Idaho)							
Big Park x CCC Camp x Chalk Creek #1 x Chalk Creek #2 x Chalk Creek #3 x Kelly Ranger Station Monte Cristo R. S. Piney LaBarge #2 Poison Meadows x Salt River Summit x Smith & Morehouse x Trial Lake x LaBarge G. S.	8700 7500 9100 7900 7500 8200 8960 8820 8500 7900 7600 9800 9500	2/25 2/28 2/24 2/24 2/25 2/25 2/26 2/26 2/28 2/25 2/29 2/26	78 48 64 48 30 71 83 90 116 63 46 84	24.3 15.8 22.2 15.2 9.0 22.6 31.7 29.5 36.4 21.4 14.3 27.9 37.2	26.0 17.3 24.4 15.3 8.1 22.3 34.4 28.6 36.6 21.6 13.0 28.5 38.7	16.8 10.2 17.7 11.1 6.1 15.2 20.2  24.4 13.3 10.1 20.7	
LOWER BEAR RIVER (Below Harer, Idaho)		. (. 0					
Beaver Creek-Skunk Creek Christensen Ranch Cub River R. S. Dry Bread Pond x Dry Creek Flat Emigration Canyon Emigrant Summit Garden City Summit Klondike Narrows Little Bear (lower) Little Bear (upper) Monte Cristo R. S. Oxford Mountain Slug Creek Divide Steep Hollow #1 Steep Hollow #2 Strawberry Creek Strawberry Mink Divide Tony Grove R. S. Willow Flat Liberty Spring	7150 5600 5400 8230 6350 6500 7350 7600 7400 6000 6550 8960 6800 7225 8500 7700 5800 6800 6250 6100 8600	2/28 2/28 2/28 2/28 2/28 2/25 2/25 2/25	44 27 27 59 28 50 82 64 37 46 83 38 61 102 80 36 47 47 113	15.6 7.6 8.5 21.0 10.1 14.7 28.7 21.8 23.0 11.4 15.6 31.7 12.9 19.0 37.7 29.0 11.9 25.9 16.8 16.9 43.4	12.8 10.6 10.2 20.7 10.8 13.0 31.6 20.8 25.2 11.8 13.4 34.4 11.5 19.4 45.8 31.2 12.4 25.8 14.1 18.3 46.9	9.6 7.3 7.5 14.3 6.2 8.6 19.2 15.1 16.7 7.6 9.4 20.2 8.0 13.1 29.4 9.3 17.2 9.5	

# PRECIPITATION (Inches)

DRAINAGE BASIN and			RENT INFORMA	ATION	FROM A	PPROX. OCT. I	TO DATE
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
Chalk Creek #1 x Chalk Creek #2 x Chalk Creek #3 x Cinnamon Crk. (3) Curtis Creek (3) Dry Bread Pond Franklin Basin (3) Garden City Summit Gold Hills (3) Kelly R. S. Klondike Narrows Little Bear (upper) Monte Cristo #2 (WB) Sagebrush Flat x Salt River Summit Tony Grove R. s. (SCS) Trial Lake x Willow Flat Clarkston (3)	9100 8000 7500 7300 8450 8230 8000 7600 10000 8200 7400 6850 8960 6300 7900 6250 9800 6100 6300			3.02b 1.82b 4.47* 3.22* 5.24b 4.94b 2.48b 3.51b 3.10 4.47 4.72*	22.80 15.94 13.95 18.89 27.87 21.23 25.99 21.82 22.85 21.00 26.45 23.89 27.66 16.77 19.45 26.50 12.82 22.10 22.85	11.82* 10.19b 16.22* 14.74 19.39 15.36 19.68 10.76 12.98 14.09* 17.36 17.52	

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bldg. – Room 4012 Salt Lake City, Utah 84111

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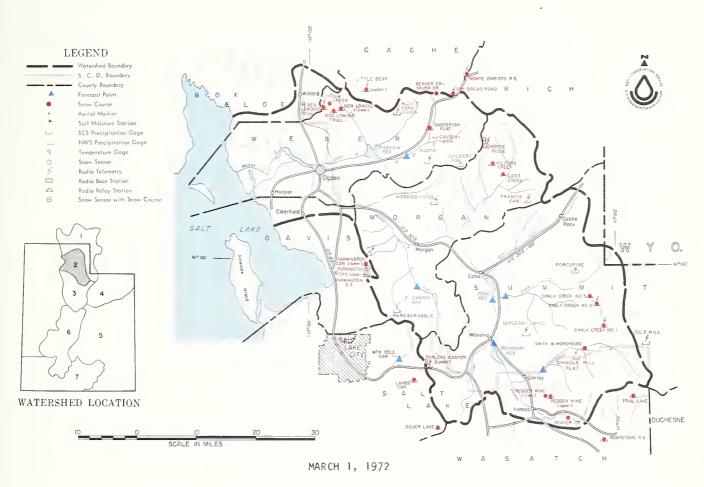
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# TIPAT ALAS MAIL

# WEBER-OGDEN WATERSHEDS in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



The 1972 Water Supply Outlook for the Weber and Ogden Basins is excellent.

 $\underline{\mathsf{Snow}}\ \mathsf{Cover}$  ranges from 131% of the March 1 average on East Canyon Creek to  $\underline{\mathsf{176\%}}\ \mathsf{on}\ \mathsf{Lost}\ \mathsf{Creek}$ . The Upper Weber and Chalk Creek both have 133% of the March 1 average snow water content. 0gden River basin has 152% of average water content. The only snow courses receiving above average increases for the month were Monte Cristo and Sagebrush Flat.

Reservoir Storage was decreased during February to make space for spring runoff but still remains well above average. Pineview had 66,800 a.f. on March 1 or 248% of its average. East Canyon held 37,500 a.f. on March 1 and held 39,000 a.f. last year at this time. Lost Creek held 14,600 a.f. and held 13,800 a.f. last year. Echo held 55,500 a.f. on March 1 or 155% of its average and Rockport held 26,200 a.f. or 110% of average. Willard Bay now has 171,800 a.f. and last year held 185,000 a.f. on March 1.

Great Salt Lake is now 4198.80 feet above mean sea level and 2.0 feet above last year at this time. This is 7.45 feet above the alltime record low of October 1963 according to the U. S. Geological Survey.

Streamflow Forecasts for the April-June period range from 125% (137,000 a.f.) for Rockport Inflow to 224% (26,000 a.f.) for Lost Creek. The South Fork of the Ogden is forecast to produce 82,000 a.f. (178%) and Pineview Reservoir Inflow is expected to be 170,000 a.f. (189%). The Weber at Oakley is forecast to produce 119,000 a.f. (128%), near Coalville 140,000 a.f. (140%) and Chalk Creek is expected to produce 41,000 a.f. (158%). East Canyon forecast indicates 27,000 a.f. (157%) and Hardscrabble 22,000 a.f. (163%) during the April-June period.

Streams in this area are expected to have higher than average snow melt peak flows again this season.

STREAMFLOW FORECASTS		THIS YEAR	1	PAST RECORD	
	FORECAST		FORECAST	THOUSAND A	CRE FEET
BASIN STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average †
WEBER-OGDEN RIVERS  Chalk Crk at Coalville East Canyon Crk nr Morgan (1) Hardscrabble Crk nr Porterville Lost Crk nr Croydon, Utah Pineview Reservoir Inflow (2) South Fork Ogden nr Huntsville Rockport Reservoir Inflow (1) Weber nr Coalville (1) Weber nr Oakley	41 27 22 26 170 82 137 140 119	158 157 163 224 189 178 125 140 128	Apr-June Apr-June Apr-June Apr-June Apr-June Apr-June Apr-June Apr-June Apr-June	 27  24 160   124	26 17.2 13.5 11.6 90 46 110 100 93

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

	PEAK FLOW (SECOND FEET)				
FORECAST POINT	Forecast Range	Average			
Lost Creek near Croydon	360 - 500	171			
So. Fork Ogden nr Huntsville	800 - 1100	643			

# RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

		11		Usable Storage					
Basin or Stream	RESERVOIR	Usable Capacity	This Year	Last Year	Average †				
Ogden	Causey Pineview	7.1 110.1	0.6 66.8	1.9 24.4	 26.9				
Weber	East Canyon Echo Lost Creek Rockport Willard Bay	48.1 73.9 20.0 60.9 193.3	37.5 55.5 14.6 26.2 171.8	39.0 61.8 13.8 21.3 185.0	11.2 35.7  23.8				
(2) - Inflow record b - Average of a than 15 year x - Adjacent dra ** - Snow pillow * - Partly estimes	than 15 years								

## WEBER-OGDEN WATERSHEDS

OW .			THIS YEAR	, — <u> </u>		ECORD
DRAINAGE BASIN and/or SNOW COURSE  NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
	Elevation					
OGDEN RIVER				-		
Beaver Crk-Skunk Creek Ben Lomond (lower)	7150 6000	2/28 2/24	44 48	15.6 17.7	12.8 17.0	9.6
Ben Lomond Peak	8000	2/24	94	38.0	36.2	26.21
Ben Lomond Trail	6000	2/24	54	21.5	18.2	11.3
Cutler Creek	6780	2/24	81	32.7	25.7	20.0
Dry Bread Pond	8230	2/28	59	21.0	20.7	14.3
Monte Cristo R. S. Sagebrush Flat	8960 6300	2/28 2/28	83 18	31.7	34.4 5.5	20.2
Jagebrash Flac	0300	2, 20		7.0	J.J	4.0
WEBER RIVER						
Beaver Creek R. S. Chalk Creek #1	7500	2/29 2/24	28 64	8.4	9.5	7.3
Chalk Creek #2	9100 7900	2/24 2/24	48	22.2	24.4 15.3	17.7
Chalk Creek #3	7500	2/24	30	9.0	8.1	6.3
Farmington Canyon (lower) x	6950	2/25	70	23.2	23.7	16.9
Farmington Canyon (upper) x	8000	2/25	98	36.7	32.6	20.9
Horse Ridge Kilfore Creek	8260 7300	2/29	80	30.4	27.0	
Lamb's Canyon x #1	6600	2/29 2/28	57 52	19.3 17.3	15.9 16.0	11.6
Lamb's Canyon #2 x	7400	2/28	52	18.1	+ -	
Park City Smt.	9300	2/26	114	43.2		
Parley's Canyon Smt.	7500	2/28	61	20.2	17.8	14.2
Redden Mine (lower)	8500	2/28	52	17.8	17.6	13.9
Redden Mine (upper) Silver Lake x	9000 8725	2/28 2/28	57 66	20.4	20.1 19.1	15.5
Smith & Morehouse	7600	2/25	46	14.3	13.0	10.1
Trial Lake x	9800	2/29	84	27.9	28.5	20.7
Lost Creek Reservoir	6125	2/29	26	9.8		

#### PRECIPITATION (Inches)

DRAINAGE BASIN and	l L	CURF	RENT INFORMA	FROM APPROX. OCT I TO DATE			
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
OGDEN RIVER  Ben Lomond (lower)  Ben Lomond Trail  Causey Dam  Ory Bread Pond  Monte Cristo #2 x (WB)  Sagebrush Flat	5850 6000 5500 8230 8960 6300	2/24 2/24 2/28 2/28 2/28 2/28	1.09 1.30 1.51 2.35 3.11 1.31	4.39b 4.41b 1.92b 4.47* 4.94b 2.48b	29.72 29.73 18.43 21.23 27.66 16.77	21.48* 12.58* 16.22* 19.68	150 138 146 131 141 156
VEBER RIVER Chalk Creek #1 Chalk Creek #2 Chalk Creek #3 Farmington G.S. Farmington Rice Horse Ridge Parley's Canyon Smt. Sergeant Lakes (3) Silver Lake (Brighton) Smith & Morehouse Trial Lake x Redden Mine (upper)	9100 8000 7500 7500 7000 8260 7500 8400 8725 7600 9800 9000	3/2 2/29 2/24 2/25 2/25 2/29 2/29 2/29 2/29 2/29 2/29	2.23 1.24 0.88 2.28 1.98  2.20 1.19 2.13 1.80 2.60	3.02b 1.82b 4.69 4.38  3.94  3.40 3.19b 4.47b	22.80 15.94 13.95 35.04 31.44 29.75 20.30 18.43 26.96 18.72 12.82 22.89	11.82* 10.19b 21.73 19.73 15.58 19.11	 134 137 161 159  130  141 144 74

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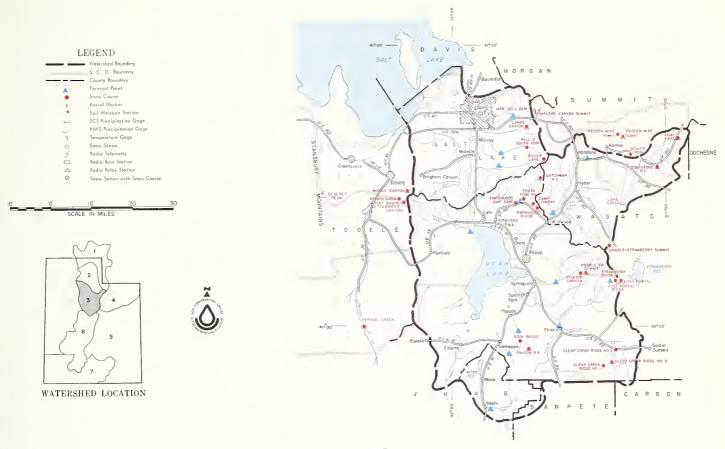


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# UTAH LAKE, JORDAN RIVER and TOOELE VALLEY WATERSHEDS in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



MARCH 1, 1972

The 1972 Water Supply Outlook for Utah Lake, Jordan River and Tooele Valley Watersheds is "above average".

Snow Cover received well below average increases due to a very dry February and now ranges from 105% of the March 1 average on Payson Creek to 132% of average on creeks flowing into the Jordan River near Salt Lake. Spanish Fork and Hobble Creek snow cover is 110% of average, American Fork is 107% average and the Upper Provo is 124% of the March 1 average. Strawberry Basin above the Reservoir is 129% of average.

Reservoir Storage is well above average. Strawberry now holds 198,200 a.f.  $\overline{(165\%)}$  and Utah Lake has 829,200 a.f. (148%). Utah Lake is now 0.58 feet below Compromise and is releasing water to hold the level as near Compromise as possible.

Streamflow Forecasts dropped due to below average increases to the snow pack during February. Forecasts now range from 126% (34,000 a.f.) for Spanish Fork to 191% (18,000 a.f.) for Parleys Creek. Farmington Creek is expected to produce 11,700 a.f. (172%), Big Cottonwood 43,000 a.f. (126%) and Little Cottonwood 42,000 a.f. (127%) during the April-July period. American Fork is forecast at 131% of average (34,000 a.f.), the Provo at Hailstone 159% (138,000 a.f.) and 155,000 a.f. (161%) below Deer Creek Dam. Hobble Creek is forecast to produce 22,000 a.f. (169%) and Utah Lake Inflow is expected to be 274,000 a.f. (141%) or about 33,000 acre feet more than last year during the April-July period. Strawberry Reservoir Inflow is expected to be 60,000 a.f. (146%) during the same period. Settlement Canyon is expected to produce 2,250 a.f.

STREAMFLOW FORECASTS		THIS YEAR	PAST RECORD		
	FORECAST		FORECAST	THOUSAND ACRE FEET	
BASIN STREAM and/or FORECAST POINT	Thousand Acre Feet			Last Year	Average +
PROVO RIVER & UTAH LAKE  American Fork nr American Fork Hoblle Crk nr Springville Provo nr Hailstone (1) Provo below Deer Crk Dam (1) Spanish Fork at Thistle Strawberry Reservoir Inflow (1) Utah Lake Inflow	34 22 138 155 34 60 274	131 169 159 161 126 146 141	Apr-July Apr-July Apr-July Apr-July Apr-July Apr-July Apr-July	    241	26 13.0 87 96 27 41 195
JORDAN RIVER & SALT LAKE  Big Cottonwood nr SLC Farmington Crk nr Farmington	43 11.7	126 172	Apr-July Apr-July	42 	34 6.8
Little Cottonwood Crk nr SLC Parley's Crk nr SLC	42	127 191	Apr-July Apr-July	41	33 9.4
TOOELE VALLEY					
Settlement Canyon	2.2	129	Apr-July		1.7

# PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

	PEAK FLOW (SECON	D FEET)
FORECAST POINT	Forecast Range	Average +
Hobble Creek near Springville	200 - 400	180
Spanish Fork near Thistle	350 - 650	307

# RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

		Usable		Usable Storage	
Basin or Stream	RESERVOIR	Capacity	This Year	Last Year	Average+
	_		100.0		1000
Spanish Fork	Strawberry	270.0	198.2	190.8	120.0
Utah Lake	Utah Lake	883.9	829.2	846.1	558.4
	-				
x - Adjacent dra					
than 15 year  * - Partly estir		in the 13-	year perio	a, but les	5

# UTAH LAKE, JORDAN RIVER AND TOOELE VALLEY WATERSHEDS

DW			THIS YEAR	THIS YEAR		PAST RECORD  Water Content (inches)		
DRAINAGE BASIN and/or SNOW COURSE	E) .	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Conte	Average		
NAME	Elevation		l		Last fear	Average		
UTAH LAKE								
Beaver Creek R. S. x	7500	2/29	28	8.4	9.5	7.3		
Camp Altamont	7300	2/29	33	11.1	10.3	12.1		
Clear Creek Ridge #1	9200	2/25	51	16.2	17.8	14.2b		
Clear Creek Ridge #2 Clear Creek Ridge #3	8000 6600	2/25 2/25	46	12.4	14.4	11.0b		
Daniels-Strawberry Smt.	8000	2/25	23 45	14.5	9.4 13.1	6.2b		
Dutchman R. S.	7560	2/29	45	17.1	14.6	14.8b		
East Portal	7560	2/28	34	11.1	11.0	8.6		
Hobble Creek Summit	7420	2/28	35	12.5	13.8	10.7b		
Packard Canyon	6400	2/28	28	8.3	10.1	8.2b		
Payson R. S.	8050	2/24	39	14.0	15.8	13.9b		
Rock Bridge	6750	2/24	33	10.6	11.5	9.66		
Soapstone R. S.	7800	2/29	46	13.9	13.0	10.5		
South Fork R. S.	6100	2/29	1	0.6	3.1	5.0		
Strawberry Divide	8000	2/28	56	20.0	19.8	15.1		
Timpanogos Cave Camp	5500	2/28	0	0.0	1.8	2.3		
Timpanogos Divide	8140	2/29	58	22.0	19.0	19.9		
Trial Lake	9800	2/29	84	27.9	28.5	20.7		
JORDAN RIVER & TOOELE VALLEY								
Lamb's Canyon #1 Middle Canyon - Tooele x	6600 7000	2/28 2/23	52 35	17.3 12.5	16.0 15.6	11.6 10.1b		
Mill D South Fork	7400	2/28	56	21.2	19.6	15.7		
Parley's Canyon Smt. x	7500	2/28	61	20.2	17.8	14.2		
Rocky Basin-Set <b>tlemen</b> t Canyon	8900	2/28	64	22.8				
Silver Lake	8725	2/28	66	23.2	19.1	18.9		
Vernon Creek	7500	2/23	24	8.1	9.4			
Lamb's C <sub>a</sub> nyon #2	7400	2/28	52	18.1				
		•			8			
				-				

## PRECIPITATION (Inches)

DRAINAGE BASIN and			ENT INFORMA		FROM AF	PPROX. OCT 17	
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent o Average
UTAH LAKE  Clear Creek Ridge #2  Daniels-Strawberry Smt.  Dutchman R. S.  East Portal Ridge  Hobble Creek Smt.  Payson R. S.  Soapstone R. S.  Timpanogos Divide  Trial Lake	8000 8000 7500 7800 7300 8050 7800 8200 9800	2/25 2/25 2/29 2/28 2/28 2/24 2/29 2/29 2/29	1.55 1.81 1.50 1.42 1.60 1.30 1.98 1.20 2.60	2.62b 2.90b  3.37  3.84b 2.71b 3.94 4.47b	14.38 17.78 21.75 16.47 17.07 14.83 17.00 23.75 12.82	13.85* 15.94b 13.78*  13.85 12.13	124 128 136 120  107 140 120 74
JORDAN RIVER & TOOELE VALLEY  Lamb's Canyon #2 Middle Canyon Mt. Dell Dam Parley's Canyon Smt. Silver Lake (Brighton) Vernon Creek Rocky Basin-Setlment Cyn	7400 7000 5500 7500 8725 7500 8900	2/28 2/23 3/1 2/28 2/29 2/23 2/28	1.65 1.43 0.65 2.20 2.13 	3.32b 2.02 3.94* 3.40	20.20 11.30 11.35 20.30 26.96 15.05 17.50		 87 119 130 141 

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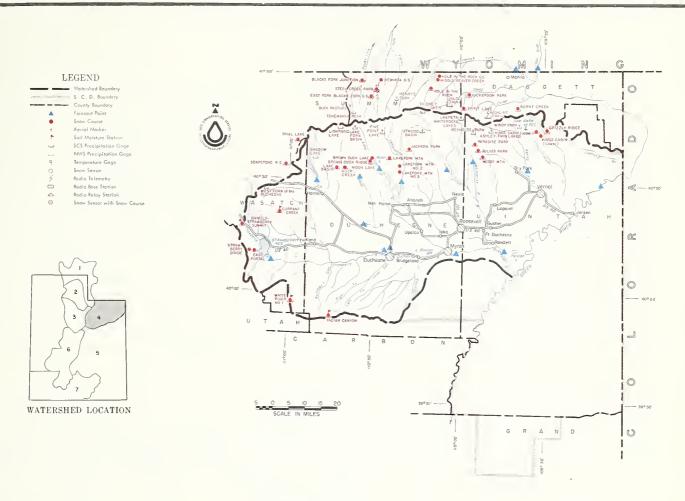
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# TINCT OLACO MAIL

# UINTAH BASIN and DAGGETT SCD's in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



MARCH 1, 1972

The 1972 Water Supply Outlook for the Uintah Basin and Daggett SCD's is still above average.

<u>Snow Cover</u> decreased during February due to little precipitation during the month and now ranges from 129% on the upper Duchesne to 159% of the March 1 average on the Uintah and Whiterocks drainages. Lakefork-Yellowstone drainages are 130% and the Strawberry 133% of average. Ashley Creek has 155% of the March 1 average water content and Henry's Fork 152%. Black's Fork snow cover is 141% of the March 1 average for the 1953-67 period.

Reservoir Storage is above average. Steinaker now holds 24,200 acre feet (144%), Moon Lake 17,400 acre feet (111%), Bottle Hollow about 9,000 acre feet and Starvation now holds 129,500 acre feet. Flaming Gorge storage was 2,562,000 acre feet or 205% of its average for March 1.

Streamflow Forecasts dropped 3 to 17% as a result of less than average increases to the snow pack and now range from 114% (75,000 a.f.) on Lakefork to 158% (1,670,000 a.f.) for the Inflow to Flaming Gorge Reservoir during the April-July period. The Duchesne is forecast to produce 119,000 a.f. (127%) at Tabiona, 209,000 a.f. (125%) at Duchesne, 290,000 a.f. (119%) at Myton.

Strawberry River is expected to produce 70,000 a.f. (143%), Rock Creek 108,000 a.f. (123%), Yellowstone 70,000 a.f. (119%), Uintah 95,000 a.f. (120%) and Whiterocks 60,000 a.f. (118%). Ashley Creek is forecast to produce 55,000 a.f. (125%) during the April-July period and Henry'e Fork 55,000 a.f. (145%) for the April-Sept period. Mean daily peak flow is expected to fall between 1000 - 1575 cfs on Ashley Creek and 700 - 1100 cfs for the Strawberry near Duchesne during the snow melt period this year.

STREAMFLOW FORECASTS		THIS YEA	R	PAST	RECORD
	FORE	CAST	FORECAST	THOUSAND	ACRE FEET
BASIN STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average +
DUCHESNE RIVER					
Duchesne nr Tabiona (1) Duchesne at Duchesne (1) Duchesne at Myton (1) Duchesne at Randlett (1) Strawberry at Duchesne Rock Crk nr Mtn. Home Lakefork below Moon Lake (1) Yellowstone nr Altonah Uinta nr Neola Whiterocks nr Whiterock	119 209 290 320 70 108 75 70 95 60	127 125 119 122 143 123 114 119 120 118	Apr-July	62	94 167 243 262 49 88 66 59 79 51
FLAMING GORGE TO DUCHESNE RIVER  Ashley Creek nr Vernal Henry's Fork at Linwood Flaming Gorge Inflow (1)	55 55 1670	125 145 158	Apr-July Apr-Sept Apr-July	50 1905	44 38 1054

# RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

		Usable		Usable Storage	
Basin or Stream	RESERVOIR	Capacity	This Year	Last Year	Average +
Ashley Creek	Steinaker	33.3	24.2	23.9	16.8
Green River	Flaming Gorge	3749.0	2562.0	1807.0	1248.0
Lake Fork	Moon Lake	35.8	17.4	12.4	15.7
Strawberry	Starvation	165.3	129.5	118.6	
<u>Uintah</u>	Bottle Hollow	11.3	9.0		
	inage				

# UINTAH BASIN & DAGGETT SCD's

)W		(	THIS YEAR	·Y	PAST R	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Conte	Average †
NAME	Elevation				Last Year	Average
UINTAH BASIN SCD						
Daniels-Strawberry Smt. x East Portal x Indian Canyon Julius Park (ing's Cabin (lower) (ing's Cabin (upper) Cakefork Mountain Cakefork Mountain #2 Cakefork Mountain #3 Mosby Mountain Paradise Park Soapstone R. S. x Etrawberry Divide x Trial Lake x	8000 7560 9100 9800 8600 8730 10200 8900 8100 9500 10100 7800 8000 9800	2/25 2/28 2/29 2/25 2/23 2/23 2/28 2/28 2/28 2/25 2/25 2/25 2/29 2/29	45 34 48 51 35 42 32 39 46 56 84	14.5 11.1 14.4 15.2 9.8 12.6 11.3 8.7 6.1 11.7 15.6 13.9 20.0 27.9	13.1 11.0 10.3 12.2 8.9 11.3 10.8 7.9 6.5 8.5 11.8 13.0 19.8 23.5	11.6 8.6 9.3 9.4 6.8 7.9 9.0 6.4 7.9 9.4 10.5 15.1 20.7
Thite River #1	8550	2/25	47	13.6	13.8	10.8
DAGGETT SCD	0005	2/22	38	10.7		7.0
Black's Fork Jct. Black's Fork G.SEast Fork Hewinata Guard Station Hickerson Park Spirit Lake Steel Creek Park Burnt Creek Grizzly Ridge	8925 9300 9500 9100 10300 9900 7900 8500	2/23 2/23 2/23 2/23 2/23 2/24 2/24	36 34 22 45 56 20 35	10.7 11.0 9.6 6.4 14.5 15.7 4.9	9.1 9.1 9.2 6.1 12.7 17.2 6.6 10.5	7.2 7.4 7.0  9.3 11.8

## PRECIPITATION (Inches)

DRAINAGE BASIN and			RENT INFORMA	TION	FROM AF	PROX. OCT. I	TO DATE
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent o Average
UINTAH BASIN SCD  Daniels-Strawberry SMT.x East Portal Ridge x Grizzly Ridge Indian Canyon Julius Park King's Cabin (upper) Lakefork Mountain Moon Lake Paradise Park Soapstone R.S.x Trial Lake x White River #1 Mosby Mountain	8000 7800 8500 9100 9800 8730 10500 8150 10100 7800 9800 8600 9500	2/25 2/28 2/24 2/29 2/25 2/23 2/28 2/29 2/25 2/29 2/25 2/25	1.81 1.42 0.53 0.32 0.17  0.78 0.10 0.30 1.98 2.60 	2.90b 3.37  1.53b 1.76*  2.24b 1.16 1.92 2.71b 4.47b 	17.78 16.47 14.73 15.00 16.01 13.62 14.96 9.10 17.28 17.00 12.82 12.45 14.15	13.85b 13.78*  10.74 9.38* 7.97* 9.18 6.41 10.30 12.13 17.36 10.40*	128 120  140 171 163 142 168 140 74 120
DAGGETT SCD  Black's Fork Jct. Burnt Creek East Fork Black's Fk.G.S. Hewinta Guard Station Hickerson Park Spirit Lake Steel Creek Park	8925 7900 9300 9500 9100 10300 9900	2/23 2/24 2/23 2/23 2/23 2/23 2/29	0.48   1.91		12.76 11.09 12.56 13.71 8.94 16.19 15.05	8.00b    11.33	160   143

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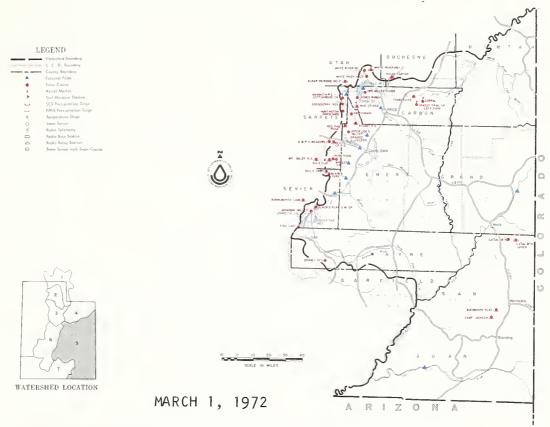
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# 

CARBON, EMERY, WAYNE, GRAND and SAN JUAN COUNTIES in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



The 1972 Water Supply  $\mathbf{0}_{\mathbf{u}}$  tlook for Southeastern Utah dropped to "near average" after a very dry February.

<u>Snow Cover</u> received well below average gains during February and now ranges from 99% of the March 1 average water content on the LaSal Mountains to 130% on the Fremont River. Price River snow cover is 123% and San Rafael tri-butaries average 111% of the 1953-67 March 1 average.

Reservoir Storage is well above average. Scofield has 41,500 acre feet or 193% of the 15-year average (1953-67), Joe's Valley 39,100 acre feet and the new Mill Site Reservoir on Ferron Creek has 4,500 acre feet in storage with a useable capacity of 16,700 acre feet. This reservoir will supplement the water supply in this area considerably. Navajo reservoir on the San Juan now holds 875,100 acre feet.

Streamflow Forecasts in this area of the state dropped 5 to 21% and now range from 111% (6,900 acre feet) on Seven Mile Creek near Fish Lake to 125% (40,000 acre feet) for Scofield Reservoir Inflow. Gooseberry Creek above Scofield is expected to produce 11,500 acre feet during the April-July period and the Price at Heiner 64,000 acre feet (118%). Huntington Creek is forecast to produce 50,000 acre feet (110%), Cottonwood Creek 53,000 acre feet (120%) and Ferron Creek 38,000 acre feet (115%). Muddy Creek is expected to produce 19,000 acre feet or 117% of its April-July average for the 1953-67 period.

TREAMFLOW FORECASTS		THIS YEAR	`	PAST	RECORD
	FORE		FORECAST	THOUSAND	ACRE FEET
BASIN STREAM and for FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average
PRICE RIVER					
Gooseberry Crk nr Scofield Price near Heiner (1) Scofield Reservoir Inflow (1) m	11.5 64 40	115 118 125	Apr-July Apr-July Apr-July	34	10.0 54 32
SAN RAFAEL RIVER					
Cottonwood Crk nr Orangeville Ferron Crk nr Ferron Huntington Crk nr Huntington	53 38 50	120 115 119	Apr-July Apr-July Apr-July		44 33 42
MUDDY RIVER					
Muddy Creek nr Emery	19.0	117	Apr-July		16.2
UPPER COLORADO BASIN					
Colorado nr Cisco, Utah Green at Green River, Utah Navajo Reservoir Inflow San Juan nr Bluff, Utah	2872 3228 625 932	102 125 101 105	Apr-July Apr-July Apr-July Apr-July	305	2802 2574 619 890
FREMONT RIVER					
Seven Mile Crk. nr Fish Lake	6.9	111	Apr-July		6.2

	PEAK FLOW (SECOND	FEET)
FORECAST POINT	Forecast Range	Average +
Ferron Creek near Ferron Muddy Creek near Emery	400 - 680 140 - 270	414 142

# RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

	PESERVOIR Usable		Usable Storage			
Basin or Stream	RESERVOIR	Capacity	This Year	Last Year	Average +	
Price River	Scofie1d	65.8	41.5	43.5	21.5	
San Rafael	Joe's Valley Mill Site	54.6 16.7	39.1 4.5	39 <b>.</b> 9	 	
San Juan	Navajo	1696.4	875.1	852.0	dia dia	
<pre>(1) - Observed f1 b - Average for x - Adjacent dr * - Partly esti</pre>		ge in stor in 15-yr p	age and d eriod, bu	iversions. less tha	n 15 years	

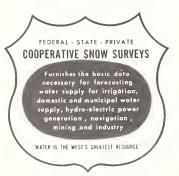
PRICE RIVER		31 43 48 13 46 42 47 33 28 48 43 46 46 45 31	9.9 15.3 14.4 4.7 16.2 14.2 13.6 9.0 7.4	11.4 16.4 10.3 6.4 19.0 11.1 13.8 9.0 6.4	8.7 14.4b 9.3 5.8 14.5b 10.4* 10.8b 7.5b 7.1b
PRICE RIVER           Dry Valley Divide         7800         2/           Gooseberry Reservoir         8700         2/           Indian Canyon x         9100         2/           Jones Ranch         7600         2/           Mammoth R.SCtnwood Crk. x         8800         2/           Mud Creek #2         8300         2/           White River #1         8550         2/           White River #2         7600         2/           White River #3         7400         2/           SAN RAFAEL RIVER         8700         2/           Buck Flat         9400         2/           Gooseberry Reservoir         8700         2/           Mammoth R.SCtnwood Crk. x         8800         2/           Red Pine Ridge         9400         2/           Rush Pond         9800         2/           Seely Creek R.S.         10000         2/           Upper Joe's Valley         8900         2/           Wrigley Creek         9000         2/	/25 /29 /28 /25 /25 /25 /25 /25 /25 /25 /25 /25 /28 /25 /28 /29 /28	43 48 13 46 42 47 33 28 48 43 46 46 45 31	15.3 14.4 4.7 16.2 14.2 13.6 9.0 7.4	16.4 10.3 6.4 19.0 11.1 13.8 9.0 6.4 17.1 16.4 19.0 14.9 13.1	14.4b 9.3 5.8 14.5b 10.4* 10.8b 7.5b 7.1b  12.7b 14.4b 14.5b 13.8b
Dry Valley Divide 7800 2/ Gooseberry Reservoir 8700 2/ Indian Canyon x 9100 2/ Jones Ranch 7600 2/ Mammoth R.SCtnwood Crk. x 8800 2/ Mud Creek #2 8300 2/ White River #1 8550 2/ White River #2 7600 2/ White River #3 7400 2/ SAN RAFAEL RIVER  Buck Flat 9400 2/ Gooseberry Reservoir 8700 2/ Mammoth R.SCtnwood Crk. x 8800 2/ Red Pine Ridge 9400 2/ Rush Pond 9800 2/ Seely Creek R.S. 10000 2/ Upper Joe's Valley 8900 2/ Wrigley Creek 9000 2/ Wrigley Creek 9000 2/	/25 /29 /28 /25 /25 /25 /25 /25 /25 /25 /25 /25 /28 /25 /28 /29 /28	43 48 13 46 42 47 33 28 48 43 46 46 45 31	15.3 14.4 4.7 16.2 14.2 13.6 9.0 7.4	16.4 10.3 6.4 19.0 11.1 13.8 9.0 6.4 17.1 16.4 19.0 14.9 13.1	14.4b 9.3 5.8 14.5b 10.4* 10.8b 7.5b 7.1b  12.7b 14.4b 14.5b 13.8b
Gooseberry Reservoir Indian Canyon x Jones Ranch Mammoth R.SCtnwood Crk. x Mud Creek #2 White River #1 White River #2 White River #3  SAN RAFAEL RIVER  Buck Flat Gooseberry Reservoir Mammoth R.SCtnwood Crk. x 8800 2, 8700 2, 8	/25 /29 /28 /25 /25 /25 /25 /25 /25 /25 /25 /25 /28 /25 /28 /29 /28	43 48 13 46 42 47 33 28 48 43 46 46 45 31	15.3 14.4 4.7 16.2 14.2 13.6 9.0 7.4	16.4 10.3 6.4 19.0 11.1 13.8 9.0 6.4 17.1 16.4 19.0 14.9 13.1	14.4b 9.3 5.8 14.5b 10.4* 10.8b 7.5b 7.1b  12.7b 14.4b 14.5b 13.8b
SAN RAFAEL RIVER         Buck Flat       9400       2,         Gooseberry Reservoir       8700       2,         Mammoth R.SCtnwood Crk. x       8800       2,         Red Pine Ridge       9400       2,         Rush Pond       9800       2,         Seely Creek R.S.       10000       2,         Upper Joe's Valley       8900       2,         Wrigley Creek       9000       2,	/25 /25 /25 /25 /28 /25 /29 /28	48 43 46 46 45 31	14.6 15.3 16.2 15.0 12.9	17.1 16.4 19.0 14.9 13.1	12.7b 14.4b 14.5b 13.8b
Gooseberry Reservoir 8700 2, Mammoth R.SCtnwood Crk. x 8800 2, Red Pine Ridge 9400 2, Rush Pond 9800 2, Upper Joe's Valley 8900 2, Wrigley Creek 9000 2, Wrigley Creek 9000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 10000 2, 100000 2, 10000 2, 10000 2, 10000 2, 100000 2, 1000000 2, 1000000000	/25 /25 /28 /25 /29 /28	43 46 46 45 31	15.3 16.2 15.0 12.9	16.4 19.0 14.9 13.1	14.4b 14.5b 13.8b
MUDDY RIVER		42	10.0 11.4	13.2 8.6 10.8	12.0 8.2b 9.0b
Dills Camp . 9200 2.	/24 /24 /24	39 37 52	12.6 11.4 18.5	12.2 11.6 20.8	17.3
FREMONT RIVER					
Farnsworth Lake x 9900 2, Fish Lake 8700 2,	/24 /28 /29 /24	40 47 21 18	11.6 16.4 6.8 5.2	9.3 18.1 3.9 2.8	7.7b 13.4b 4.7b 4.9b
SOUTHEASTERN UTAH DRÁTNAGES					
Camp Jackson 8600 2 LaSal Mountain (lower) 8800 2	/22 /23 /24 /24	34 29 22 38	12.2 9.7 6.4 11.9	9.7 9.0 7.6 12.6	9.8b 9.2b 7.2 11.3b

## PRECIPITATION (Inches)

DRAINAGE BASIN and			RENT INFORMA		FROM AF	PROX. OCT. I	
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
PRICE RIVER  Clear Creek Ridge #2 x	8000	2/25 2/25	1.55 1.05	2.62b 3.39b	14.38 14.70	11.59* 13.83	124 106
Gooseberry Reservoir Indian Canyon Mammoth R.S. #2 Mud Creek White River #1	9100 8600 8300 8600	2/29 2/25 2/28 2/25	0.32 1.50 1.80	1.53b 3.05b 2.42*	14.70 15.00 14.30 10.90 12.45	10.74 14.40 11.31 10.46*	140 99 96 119
SAN RAFAEL RIVER  Buck Flat G.B.R.C. Meadows x Gooseberry Reservoir x Orange Olsen Red Pine Ridge	9400 10000 8700 7300 9400	2/25 2/29 2/25 2/28 2/28	1.40 1.75 1.05 0.30 1.75	3.41b 4.37 3.39b  4.65b	15.30 18.80 14.70 8.55 18.20	12.46* 16.41 13.83  15.15*	123 114 106  120
FREMONT RIVER  Black's Flat-U.M. Creek Farnsworth Lake x Fish Lake	9250 9900 8700	2/24 2/28 2/24	 1.64	3.75b	11.25 16.34 8.20	8.93* 13.52b 6.38b	126 121 129
SOUTHEASTERN UTAH DRAINAGES  Buckboard Flat Camp Jackson LaSal Mountain (upper)	9000 8600 9600	2/22 2/23 2/24	  	 2.19*	20.00 16.03 14.15	14.04b 11.66 	142 137

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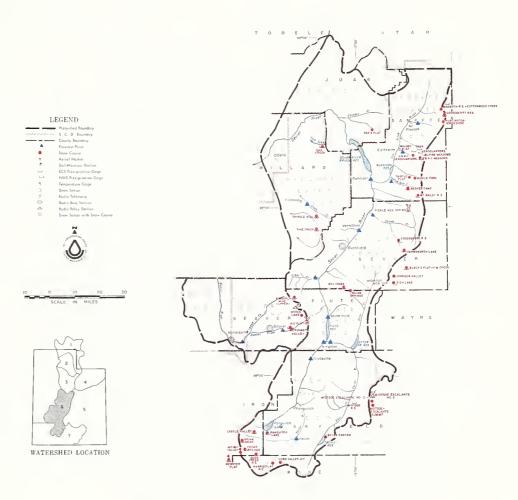


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SEVIER RIVER BASIN including BEAVER RIVER in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



MARCH 1, 1972

The 1972 Water Supply Outlook for the Sevier and Beaver River Basins is "above average" on the main Sevier and "near average" on the East Fork Sevier.

Snow Cover was reduced by a very dry February and now ranges from 101% of the March 1 average on the Beaver to 117% of average on the higher elevations of the East Fork of the Sevier. The Sevier above Hatch is 113%, Clear Creek 106%, and Salina Creek 114%. San Pitch tributaries are about average. Warm temperatures and the lack of precipitation removed snow from lower elevations and exposed south slopes at higher elevations.

Reservoir Storage is wall above average. The three main Sevier reservoirs are now 75% of useable capacity and 194% of their March 1 average for the 1953-67 period. Otter Creek now holds 35,000 acre feet, Piute 61,000 acre feet and Sevier Bridge 173,600 acre feet. Gunnison is full with 18,200 acre feet. Minersville Reservoir has 15,400 acre feet or 145% of its March 1 average and about 1500 acre feet less than last year at this time.

Streamflow Forecasts dropped due to a much drier than average February and now range from 85% of average (4,000 a.f.) for the Inflow to Minersville Reservoir during the April-June period to 162% (73,000 a.f.) for the Vermillion to Gunnison Inflow during the March-June period. The Sevier at Hatch is forecast to produce 42,000 acre feet (127%), at Circleville 35,000 acre feet (130%) and at Kingston 18,400 acre feet (119%) during the April-July period. Clear Creek forecast dropped to 12,100 acre feet (97%), the East Fork Sevier- 10,000 acre feet (85%) and Antimony Creek (7,000 acre feet (90%) for the same period. Salina Creek is forecast to produce 9,000 acre feet (152%) (April-June) and the Sevier at Gunnison is expected tp produce 42,000 acre feet (135%) (April-July).

The Beaver River is expected to produce 20,000 acre feet or 106% of its April-July average. The October-March inflow to Sevier Bridge reservoir is expected to be 95,000 to 105,000 acre feet and 1800 - 2200 acre feet of flow above 360 cfs is expected below Vermillion Oam. Primary water percentages are still expected to be a little above the average although another dry month will probably drop these forecasts to slightly below average.

STREAMFLOW FORECASTS		THIS YEA	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND	ACRE FEET
BASIN STREAM and/or FORECAST POINT	Thousand Percent of Average		PERIOD	Last Year	Average +
SEVIER RIVER					
Chalk Creek nr Fillmore Clear Crk nr Sevier (above Div.) East Fork Sevier nr Kingston (1) Antimony Crk nr Antimony Inflow Kingston to Vermillion Dam Vermillion Dam to Gunnison Salina Crk at Salina (1) Sevier nr Circleville Sevier nr Gunnison Sevier at Hatch Sevier nr Kingston Sevier below Piute Dam (1)	16.4 12.1 10.0 7.0 30 73 9.0 35 42 42 18.4 28	97 85 90 100 162 152 130 135 127	Apr-July Apr-July Apr-July Apr-June Mar-June Apr-June Apr-July Apr-July Apr-July Apr-July Apr-July	12.2	13.2 12.5b 11.7 7.8b 30 b 45 b 5.9* 27 31 b 33 15.4 29
SAN PITCH RIVER Ephraim Creek nr Ephraim Pleasant Crk nr Mt. Pleasant	17.0		Apr-July Apr-July		13.9b 7.8b
BEAVER RIVER Beaver nr Beaver Minersville Reservoir Inflow (1)	18.0	95 85	Apr-July Apr-June	19.4	18.9 4.7

#### FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow	Forecast Date	Average Date
	Value	Stream Will Recede	of Low Flow
	Second/Ft.	to Low Flow Value	Value
Clear Creek nr Sevier (above Div.) Salina Creek at Salina Sevier at Circleville (Circle Valley) Sevier at Hatch (upper)	5	July 15	July 19
	25	June 12	June 10
	90	June 20	June 24
	100	July 6	July 10

## PRIMARY WATER RIGHT FORECASTS (PERCENT OF WATER RIGHT DELIVERED)

RIVER SECTION	Percent Forecast For This Year	Average Percent Delivered During 15 year Period	Forecast Period
Sevier River			
Below Vermillion Dam Circle Valley Panguitch Valley Sevier Valley	70 80 100 42	58 66 84 40	Apr-Sept Apr-Sept Apr-Sept Apr-Sept

#### OTHER SPECIAL FORECASTS

Below Vermillion - Flow above 360 second feet should total about 1,800 - 2,200 acre feet.

Inflow to Sevier Bridge Reservoir from October 1 to March 31 is expected to be 95,000 - 105,000 acre feet.

- (1) Observed flow corrected for change in storage and diversions
- b Average for all past record within 15-yr. period, but less than 15 years.
- # Partly estimated

## SEVIER RIVER BASIN INCLUDING BEAVER RIVER

SNOW			THIS YEAR		PAST R	ECORD
DRAINAGE BASIN and/or SNOW COURSE		Date	Snow Depth	Water Content	Water Conte	ent (inches)
NAME .	Elevation	of Survey	(Inches)	(Inches)	Last Year	Average +
UPPER SEVIER RIVER (South of Richfield, Utah)						
Big Flat x  Box Creek  Bryce Canyon  Castle Valley  Duck Creek R. S.  Fish Lake x  Harris Flat  Kimberly Mine  Long Valley Jct. x  Midway Valley  Panguitch Lake  Squaw Springs  Widtsoe Escalante Smt.  Widtsoe-Escalante #2  Widtsoe-Escalante #3  Farview  LOWER SEVIER RIVER	10290 9800 8000 9700 8700 8700 7700 9300 7500 9800 8200 9500 9500 9500 8200	2/22 2/25 2/28 2/25 2/24 2/29 2/24 2/23 2/24 2/25 2/25 2/25 2/25 2/28 2/28 2/28 2/29	42 36 7 37 34 21 6 36 0 58 10 22 20 29 37 18	13.1 10.1 2.0 13.1 11.8 6.8 2.6 11.4 0.0 20.9 3.4 6.3 5.4 7.8 10.7 5.1	14.9 9.5 4.9 12.6 11.5 3.9 8.5 13.7 2.7 16.0 3.8 5.7 4.0 7.0 9.1	13.0 9.4b 2.4b 9.8b 10.2 4.7b 6.1 10.8b 2.2 16.5b 3.1 5.3b 5.3 6.8 8.1b
(Including San Pitch River)  Beaver Dams Farnsworth Lake G.B.R.C. Headquarters G.B.R.C. Meadows Gooseberry R. S. Gooseberry Reservoir x Mammoth R.SCtnwood Crk. Mt. Baldy R.S. Pine Creek Rees's Flat Shingle Mill	8000 9900 8700 10000 8400 8700 8800 9500 8700 7300 6200	2/24 2/28 2/29 2/29 2/28 2/25 2/25 2/24 2/28 2/23 2/28	22 47 36 53 28 43 46 52 30 31 22	7.9 16.4 11.9 18.7 8.8 15.3 16.2 18.5 11.4 9.1 7.6	9.2 18.1 13.9 23.4 11.6 16.4 19.0 20.8 14.3 13.5 9.4	9.6 13.4b 12.7 18.7 8.8 14.4b 14.5b 17.3 12.1b 8.9b 6.5b
BEAVER RIVER Big Flat Merchant's Valley Otter Lake	10290 8200 9300	2/22 2/22 2/22	42 18 38	13.1 6.0 11.8	14.9 8.0 12.8	13.0 6.9 10.6

# RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

		Harbia	Usable Storage				
Basın or Stream	RESERVOIR	Usable Capacity	This Year	Last Year	Average+		
Sevier River	Gunnison Otter Creek Piute Sevier Bridge	18.2 52.5 71.8 236.0	18.2 35.0 61.0 173.6	17.3 46.8 50.0 218.2	23.0 35.4 80.7		
Beaver River	Minersville(Rky Fd)	23.3	15.4	16.9	10.6		

#### PRECIPITATION (Inches)

DRAINAGE BASIN and		CURI	RENT INFORMA	TION	FROM AF	PROX. OCT 1	TO DATE
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
December 1	8000	2/24		2 004	11 05	11 20.	105
Beaver Dams		2/24	0.70	3.09*	11.85	11.30*	105
Big Flat	10290	2/25	0.70	3.63b	11.13	11.86	94
Box Creek	9800				11.76	10.13b	116
Castle Valley	9700	2/25	0 20		11.44	11.30b	101
Duck Creek R.S.	8560	2/24	0.30	3.27b	16.21	13.45*	120
Farnsworth Lake	9900	2/28	1.64	3.75b	16.34	13.52ь	121
Fish Lake	8700	2/24			8.20	6.38b	128
G.B.R.C. Headquarters	8700	2/29	1.36	3.66	14.77	13.77	107
G.B.R.C. Meadows	10000	2/29	1.75	4.37	18.80	16.41	114
G.B.R.C. Oaks	7655	2/29	0.87	2.61	10.00	9.52	105
Gooseberry R.S.	7800	2/28	1.03	2.87b	11.76	9.56*	123
Gooseberry Reservoir x	8700	2/25	1.05	3.39Ъ	14.70	13.83	106
Kimberly Mine	8900	2/23	0.54	3.24*	12.09	13.08	92
Mammoth R.S. #2 x	8600	2/25	1.50	3.05b	14.30	14.40	99
Mt. Baldy	9500	2/24		3.00*	14.70	12.43	118
Panguitch Lake	8200	2/25			9.27	5.51b	168
Pine Creek	8700	2/28	l – – j		19.12	16.09ь	119
Shingle Mill	6200	2/28	0.93	2.98*	13.15	10.58	124
Webster Flat x	9200	2/25	0.30	3.53*	17.45	14.82*	118
Widtsoe-Escalante #3	9500	2/28	0.35	2.30b	11.69	9.95b	117
Widtsoe R.S.	7600	2/28	0.07	0.68	5.14	3.78	136
Beaver Canyon P.H.	7275						
Big Flat	10290	2/22	0.07	3.63b	11.13	11.86*	94
Merchant's Valley	8200	2/22	0.67		9.57		
	1	2/ ==	0.07		2.21		

# **PEAK FLOWS** (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FOR FOLOR DOWN	PEAK FLOW (SECOND FEET)				
FORECAST POINT	Forecast Range	Average +			
Beaver nr Beaver Clear Creek near Sevier Salina Creek near Sa;oma Sevier River at Hatch Sevier River at Circleville Sevier River at Kingston	150 - 350 130 - 150 160 - 200 308 - 552 371 - 583 233 - 329	215 156b 133* 370 292 223			

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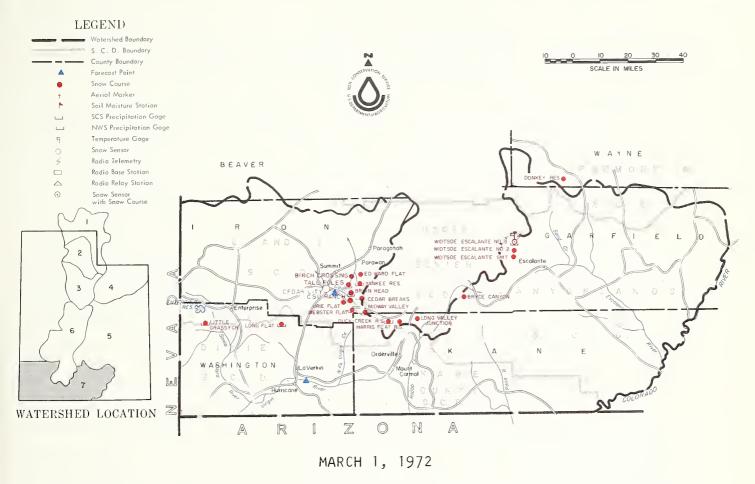


WATER IS THE WEST'S GREATEST RESOURCE

TIRAT ALAQ MALL

# EAST GARFIELD, KANE, WASHINGTON and IRON COUNTIES in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES-DIVISION OF WATER RIGHTS



The 1972 Water Supply Outlook has dropped to "near average" for larger streams of Southwestern Utah and "below average" for smaller low elevation streams.

Snow Cover was reduced during February by warm temperatures and the lack of precipitation and now ranges from 32% of average on the New Castle to New Harmony drainage to 129% of the March 1 average on Parawan Creek. Coal Creek snow cover is 123%, Virgin River 112% and the upper Escalante 118% of the March 1 average.

Reservoir Storage in Lake Powell is now 13,112,000 acre feet or 255% of average and 106% of last March 1.

Streamflow Forecasts have dropped 18 to 23% since February 1st, due to an extremely dry month. The Virgin River is now forecast to produce 38,000 acre feet (100%) during the April-June period and the Santa Clara near Pine Valley is expected to produce about 1500 acre feet (45%) during the same period. Coal Creek is forecast to produce 15,900 acre feet (115%) during the April-July period and the Inflow to Lake Powell is expected to be 7,444,000 acre feet or 114% of average for the April-July period. Another dry month will cause all forecasts to drop below average in this area.

STREAMFLOW FORECASTS		THIS YEA	R	PAST	RECORD
	FORECAST		FORECAST	THOUSAND ACRE FEET	
BASIN STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average +
VIRGIN RIVER  Virgin nr Virgin Santa Clara nr Pine Valley  COAL CREEK	38 1.5	100 45	Apr-June Apr-June		38 3.3b
Coal Crk nr Cedar City UPPER COLORADO	15.9	115	Apr-July		13.8
Lake Powell Inflow	7444	114	Apr-July	8378	6527

# RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

			Usable		Usable Storage	
Basin or Stream RESERVOIR	RESERVOIR	Capacity	This Year	Last Year	Average +	
Colorado	Lake	Powe 11	25002.0	13,112.0	12414.0	5138.0
<ul><li>b - Average for al</li><li>15 years</li><li>x - Adjacent drain</li><li>* - Partly estimate</li></ul>	age	record within	15 year pe	riod, but	less than	

SNOW		THIS YEAR	PAST RECORD			
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth	Water Content	Water Conte	
NAME	Elevation	of Survey	(Inches)	(Inches)	Last Year	Average +
ESCALANTE RIVER						
Widtsoe-Escalante Smt. Widtsoe-Escalante #2 Widtsoe-Escalante #3	9500 9500 9500	2/28 2/28 2/28	20 29 37	5.4 7.8 10.7	4.0 7.0 9.1	5.3. 6.8 8.1b
PARIA RIVER						
Bryce Canyon x Rainbow Point x	8000 9100	2/28 2/29	7 15	2.0 4.5	4.9 	2.4b
VIRGIN RIVER & COAL CREEK						
CSU Ranch Duck Creek R.S. Harris Flat x Long Valley Jct. Midway Valley x Urie Flat Webster Flat	8200 8700 7700 7500 9800 8450 9200	2/25 2/24 2/24 2/24 2/25 2/25 2/25	14 34 6 0 58 16 40	5.8 11.8 2.6 0.0 20.9 6.2 15.1	8.1 11.5 8.5 2.7 16.0 7.9 14.0	10.2 6.1 2.2 16.5b 5.6b 12.2
PAROWAN CREEK						
Birch Crossing Brian Head Ed Ward Flat Tall Poles Yankee Reservoir	8100 10000 8300 8800 8700	2/24 2/24 2/24 2/24 2/24	14 54 20 41 28	5.7 18.9 6.9 13.2 9.2	6.1 17.2 8.2 12.1 9.5	  5.3b  6.9b
ENTERPRISE TO NEW HARMONY DE	RAINAGES					
Little Grassy Creek Long Flat	6100 8000	2/28 2/28	0 5	0.0	1.2 3.9	2.3b 4.3b
*						

## PRECIPITATION (Inches)

DRAINIAGE RASINI and		CURI	CURRENT INFORMATION			FROM APPROX. OCT I TO DATE		
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent o Average	
ESCALANTE RIVER								
Nidtsoe-Escalante #3	9500	2/28	0.35	2.30b	11.69	9.95	117	
VIRGIN RIVER								
Duck Creek R.S. Webster Flat	8560 9200	2/24 2/25	0.30	3.27b 3.53b		13.45* 14.82*	120 118	
COAL CREEK								
Vebster Flat	9200	2/25	0.30	3.53ъ	17.45	14.82*	118	
PAROWAN CREEK								
Tall Poles Yankee Reservoir	8800 8700	2/24 2/24	0.40	 2.13b	13.99 10.37	 8.49	 122	
ENTERPRISE TO NEW HARMONY DRAINAGE								
Little Grassy Creek Long Flat	6100 8000	2/28 2/28			12.15 10.14	 8.91	 114	

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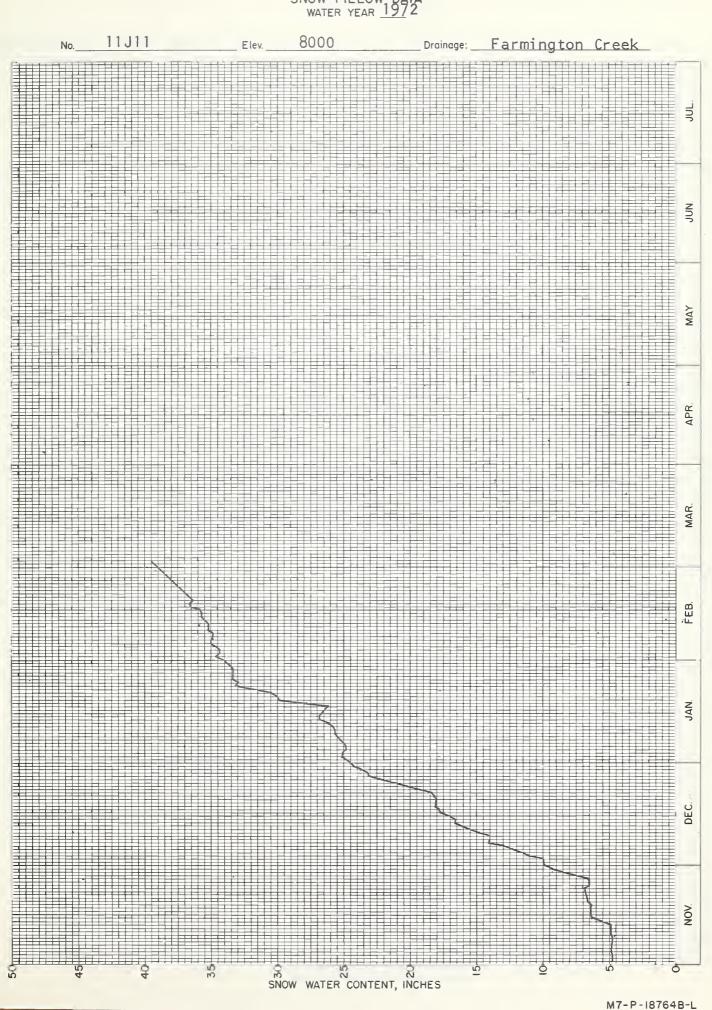


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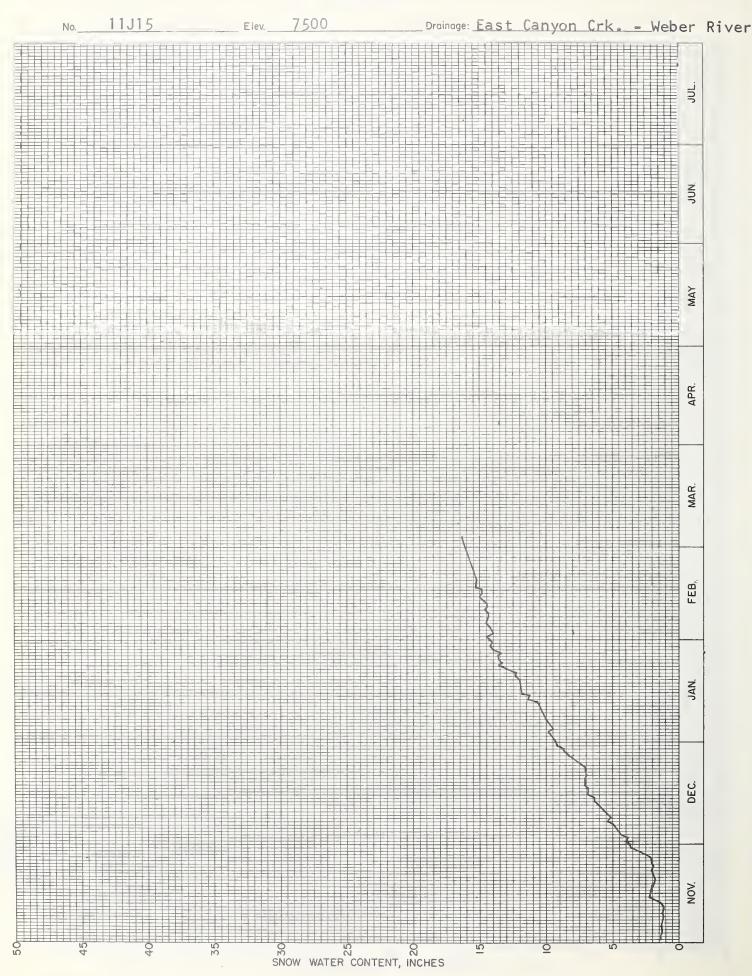


# FARMINGTON CANYON (upper)

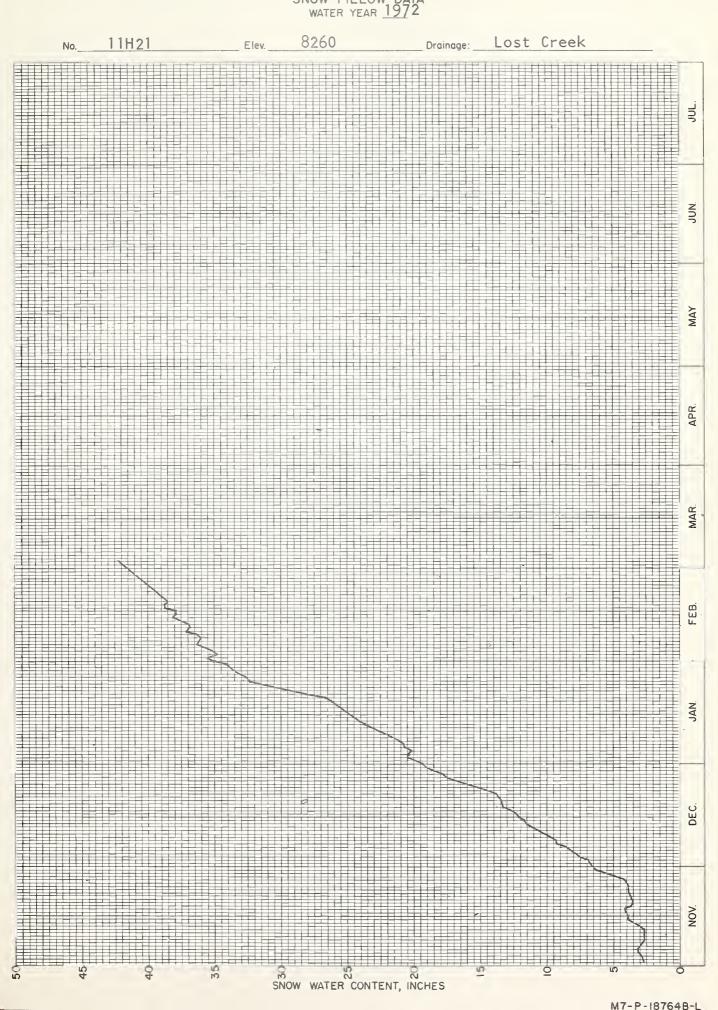
# SNOW PILLOW DATA WATER YEAR 1972



# SNOW PILLOW DATA WATER YEAR 1972



SNOW PILLOW DATA WATER YEAR 1972





# Agencies Cooperating in Utah Snow Surveys

## U.S. GOVERNMENT AGENCIES

- U.S. Department of Agriculture Soil Conservation Service Forest Service
- U.S. Department of Commerce NOAA, National Weather Service
- U.S. Department of Interior
  Bureau of Reclamation
  Geological Survey
  National Park Service

#### STATE AGENCIES

Utah State University
Utah Fish and Game Department
Utah State Department of Natural
Resources, Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

#### MUNICIPALITIES

Manti Salt Lake City

#### ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

#### PRIVATE AGENCIES

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